

Ref. No PH/PSA/135/2017-18

4<sup>th</sup> May 2017

Dear Sir/Madam,

Kindly send your best quotation for the **High Pressure 30 keV RHEED system for monitoring growth of oxides during PLD** with the following specifications on C.I.P. Bangalore basis. Your quotation should clearly indicate the terms of delivery, delivery schedule, E.D., payment terms etc. The tender should be submitted in two separate sealed envelopes - one containing the technical bid and the other containing the commercial bid, both of which should reach us, duly signed on or before 26<sup>th</sup> May 2017 to

**The Chairman  
Department of Physics,  
Indian Institute of Science, Bangalore 560012**

Please enclose a compliance statement along with the technical bid.

Thanking you

Prof. P.S. Anil Kumar  
Dept. of Physics  
Indian Institute of Science

**Specification**

**High Pressure 30 keV RHEED system for monitoring growth of oxides during PLD**

**System**

Electron source mounted on CF63, Source power supply, Remote control, Beam blanking, Double differential pumping option (pumps will be provided), Magnetic shielding, Electronic beam alignment.

Suitable gate valve

Electronically controlled X and Y deflection with electronic beam finder Mechanical tilt, allowing proper pre-positioning, and allows the RHEED to follow different sample positions needs to be integrated into the gun side insert. XY manipulator 4.5" flange, +/-12.5 mm travel, 2° tilting possibility

RHEED screen with shutter introducing into the chamber, mounted on CF150 chamber flange with minimum 90 mm screen mounted

PC connection (optional)

External  $\mu$  metal shielding for the electron gun (optional)

## **Spare Parts**

Filament

## **Software**

KSA400 for Standard RHEED k400-12S - kSA 400 Analytical RHEED System. Should include k700-12 detector (686 x 492 pixel, 12-bit) with GigE interface and all standard hardware and software as listed in the kSA 400 Product Specifications (frame digitization board, viewport mount, optics, cabling, and software.)

Or

kSA 400 Lite Analytical RHEED System with k700-12 detector that Includes the multipurpose k700-12 detector (12-bit bit depth, 1/2" CCD, 656 x 492 pixels, 88 fps), standard hardware (such as PoE GigE frame digitization board for PCIe slot, flange mount, optics, and 30 ft CAT5 cable) and kSA 400 Lite software as listed in the kSA 400 Product Specifications. This system should have the capability to be upgraded to full kSA 400 Analytical RHEED system software.

Both should be quoted separately

## **Others**

Acceptance criteria document should be included.

A compliance statement should be included

Details of warranty and the cost for AMC

Details of installation and training plan should be included.